<u>Amendments to Claims:</u>

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>Listing of Claims:</u>

1. (Currently Amended) A satellite ground station system, said system in signal communication with a satellite, said system comprising:

a signal control unit configured to modulate a transmission signal to said satellite in accordance with a theoretical P1db point of said system, said P1db point in correlation with <u>power supplied to a transceiver, wherein said power does not include RF power</u> ~~a dc current sensor~~;

an antenna unit configured to receive a communication from said satellite and to transmit said transmission signal to said satellite; and

a means for two-way signal communication between said control unit and said antenna unit.

2. (Currently Amended) A satellite ground station system of the type capable of receiving and transmitting RF signals to a satellite, a transmitted RF signal having a transmission power level as determined by a signal control unit of said system, said signal control unit <u>configured to measure the power supplied to a transceiver and to vary</u> ~~varying~~ the power level of said transmitted RF<u> signal based on</u> ~~signal, in accordance with a dc current sensing means~~<u>said measured power</u> such that a maximum<u> transmitted RF</u> ~~transmission~~ power level is determined <u>based on said measured power, wherein said measured power does not include RF power.</u> ~~by said dc current sensing means.~~

3. (Currently Amended) An uplink power control system for a satellite communication station, said system transceiving RF signals with a satellite, said power control system comprising:

a control unit having a modem and a <u>supplied power</u> ~~dc current~~ sensing mechanism, said modem providing a signal for transmission to said satellite in accordance with said <u>supplied power</u> ~~dc current~~ sensing mechanism, <u>wherein the supplied power does not include RF power</u>;

an antenna unit having an antenna for receiving said RF signal from said satellite and transmitting an RF signal to said satellite, said transmitted RF signal in accordance with said signal for transmission received from said modem of said control unit; and

a signal transfer means between said control unit and said antenna unit.

4. (Currently Amended) The power control system of claim 3 wherein said ~~dc current~~ <u>supplied power</u> sensing mechanism comprises a dc current sensor in electrical communication with an RF power control device.

5. (Currently Amended) The power control system of claim 3 wherein said ~~dc current~~ <u>supplied power</u> sensing mechanism senses the dc current provided to said antenna unit and comprises a means for determining a compression point of said system.

6. (Original) The power control system of claim 5 wherein said means for determining a compression point comprises determining the change in dc current provided to said antenna unit.

7. (Original) The power control system of claim 3 wherein said signal transfer means comprises a cable.

8. (Currently Amended) A method for signal control in a satellite ground station, said station of the type for transmitting and receiving signals between a satellite, said method comprising:

receiving, at a transceiver unit of said station, a signal for satellite transmission from a control unit of said station;

detecting, at said control unit, ~~a DC current~~ the power supplied to said transceiver unit

in the presence of said signal for satellite transmission, wherein the detected power supplied

to said transceiver unit does not include RF power;

determining a desired maximum signal power level of said signal based on said

detecting step;

modulating said signal in accordance with said desired maximum signal power level;

and

transmitting said modulated signal from said transceiver unit to said satellite.

9. (Original) The method of claim 8 wherein said determining step comprises determining a

P1db compression point.

10. (Original) The method of claim 9 wherein said determining step further comprises

determining an inflection point in a theoretical current curve comprising a plurality of current

points.

11. (Original) The method of claim 8 wherein said determining step comprises exploiting a

relationship of said desired maximum signal power level from a plurality of current points

from said detecting step.

12. (Previously presented) The method of claim 8 wherein said determining step comprises

determining a slope of a theoretical current curve comprising a plurality of current points

from said detecting step.

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Previously Presented) A computer program embodying instructions executable by a

processing means to perform method steps for determining a compression point in an uplink

power control system, the system including a control unit and an antenna unit configured to communicate with each other over a communication channel, said method steps comprising:

generating a signal in said control unit to produce a low level RF signal in said antenna unit;

increasing said signal strength in said control unit to produce a higher level RF signal in said antenna unit;

detecting, in said control unit, a current level in said signal;

determining, in said control unit, a first slope of a theoretical current curve created from at least two detected current levels;

determining, in said control unit, a second slope of said theoretical current curve;

comparing said first and second slopes to determine whether said second slope is greater than said first slope; and

repeating the method steps until said comparing step determines said second slope is not greater than said first slope.

17. (Previously Presented) A method for determining a P1db compression point of a power control system, said system having a control unit in communication with an antenna unit, said method comprising the steps of:

providing a signal to said antenna unit, said signal comprising a signal power level;

detecting a dc current level of said signal;

analyzing a change of said current level, said change corresponding to a difference between a reference point and said detected dc current level;

increasing said signal power level and repeating the above steps; and

determining an inflection point in said change of said current level, said inflection point corresponding to said P1db compression point.

18. (Previously Presented) The method of claim 17 wherein said analyzing comprises a theoretical graphing of a plurality of points, said plurality of points corresponding to a plurality of detected current levels.

19. (Previously Presented) The method of claim 17 wherein said determining comprises calculating a slope from a curve of said change of said current level.